Public and Private Sectors Working Together to Drive an Interoperable Health Care System

Expand Partnerships with Clinical Medicine

Public Health Information Network
Stakeholders' Conference
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Foundation for eHealth

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Goals for My Talk Today

- ❖ Talk about why an interconnected, interoperable, electronic health system is important to you…

- ❖ Give you a sense of the momentum that is building around this goal and agenda…

- ❖ Engage your active support in helping to move this agenda…

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Key Take-Aways

❖ Public Health…and Health Care in general, is in crisis – public health threats….rising costs…unacceptable quality and safety issues…

❖ Interoperable health information systems play a critical role in helping public health address its needs

❖ Interoperable health information systems…standardized data play a key role in helping us get to a higher quality, safer, more cost effective health care system

❖ No single constituency is strong enough to push these changes through

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Key Take-Aways

❖ Alignment in our "push" and "pull" strategies across constituencies is necessary to move us to a system that is electronic and standards-based

❖ Everyone stands to benefit…public health, practicing clinicians, hospitals, payers, ultimately patients….

❖ Momentum for this is building but there is still a lot more work to do

❖ Public health must do its part in pushing this change!

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State of the U.S. Healthcare System

❖ Looming Health Care Crisis

❖ Health Care Costs are Continuing to Rise

❖ Clinicians are Leaving Practice

❖ Nursing Shortage Continues

❖ Enormous Number of Uninsured

❖ Patients and Consumers are Demanding More

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State of the U.S. Healthcare System

- ❖ Practicing Medicine is Increasingly Complex

- ❖ Enormous Quality and Safety Issues

- ❖ Practice Variations Unacceptable

- ❖ Slow Translation of Research to Practice

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Public Health Challenges

❖ Global response to SARS underscores the vital significance of disease surveillance in protecting the public health from natural…and unnatural outbreaks

❖ State and local public health authorities having to rely primarily on passive surveillance systems that are prone to chronic under-reporting and significant time lags between diagnosis and receipt of data by public health authorities

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Public Health Challenges

❖ Initiatives underway by public health authorities to develop active electronic surveillance systems have largely focused on hospitals and emergency rooms where access to data has been challenging

❖ Level of preparedness in states and cities is varied

❖ States and metropolitan areas are focused on their specific populations, but there is little coordination across regional areas or state lines

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Public Health Challenges

❖ Since infectious diseases (either naturally occurring or deliberately spread) know no jurisdictional boundaries, the lack of national or regional surveillance coordination or capacity represents a significant gap

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How Do We Handle Public Health Surveillance Today?

❖ Two Kinds of Surveillance:

 ➢ Direct observation, diagnosis and reporting by astute clinicians or from lab results

 ➢ Observation of community-wide patterns that indicate a possible disease outbreak

❖ An effective disease surveillance system uses both strategies

❖ Both strategies require establishing systems that enable flows of information and health data within communities to permit timely recognition of events

❖ They must also adapt to increasingly regional and national nature of labs and health care databases

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How Do We Handle Public Health Surveillance Today?

❖ For most surveillance data, initial source of information is provided by health care professionals

❖ Currently our surveillance systems use paper or facsimile reporting by health care providers to public health agencies. If something is unusual, the provider may call the health department immediately

❖ For routine public health surveillance, this largely paper-based system is burdensome to both providers and health departments often resulting in reports that are not complete or timely

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How Do We Handle Public Health Surveillance Today?

❖ The volume of paper reports and the need to enter information collected into various information systems (and by hand) leads to errors and duplication of efforts

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Where We Need to Go….

❖ Integrated electronic surveillance information systems

❖ Real-time transmission of standardized, electronic data from existing information systems within the health care system (laboratory systems, ADT systems, pharmacy systems, etc.) and other data sources

❖ Direct linkages to the health care delivery system

❖ Collaborations among various levels of government (national, state and local) and the private sector are critical

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Enormous Progress Has Been Made

❖ CDC's Public Health Information Network (PHIN)

  ➢ Expands the NEDSS approach of standards-based systems integration and applies it to other functions of the public health information life cycle

  ➢ Enables electronic real-time data flow, computer assisted analysis, decision support, professional collaboration, and rapid dissemination of information to public health, the clinical community, and the public through a common integrated and standards-based framework

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Examples of Projects

❖ New York City: well-established surveillance system of non-traditional data sources of pre-diagnostic indicators for surveillance and event detection…Farzad will share with you today….

❖ Pennsylvania: early warning system (RODS), using symptom data from emergency departments as a way to detect unusual patterns of illness and automatically alert providers

❖ Indianapolis Network for Patient Care: community-based electronic health record covering most of Indianapolis

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Examples of Projects

❖ National Bioterrorism Syndromic Surveillance Demonstration Program: Collaboration between CDC, AAHP, several health plans, and Harvard Pilgram Health Care…Goal: create a system of access to data maintained by health plans (e.g. administrative data such as diagnoses)

❖ Michigan: implementation of secure web-based disease surveillance system to improve timeliness and accuracy of disease reporting

❖ Kansas City: uses Cerner system to detect potential threats

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What are the Barriers?

❖ Lack of funding…emergency supplemental offered almost $1 billion, but not enough….need many years of sustained investment to modernize public health information infrastructure

❖ Work force issues…lack of trained, public health laboratorians, epidemiologists and informatics expertics

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What are the Barriers?

❖ Lack of standards…interoperable systems

❖ Lack of information systems within the provider environment, which are due to…

 ➢ Organizational change and leadership

 ➢ Lack of capital to invest

 ➢ Lack of interoperability and standards - will my systems talk to each other? to other systems? what if my vendor goes out of business?

 ➢ Design issues

❖ Lack of coordination across public and private sectors…across various levels of government

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Momentum for the Adoption of IT is Building

❖ Momentum for the Use of Information Technology to Improve Quality, Safety and Cost-Effectiveness is Building and eHI has Played a Strong Role:

- Legislation Being Introduced

- Increased Attention by Administration

- Private Sector is Stepping Up….

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Patient Safety Improvement Act (H.R. 663)

❖ Key Sponsors: Reps. Bill Thomas (R-CA), Nancy Johnson (R-CT), Billy Tauzin (R-LA) and Michael Bilirakis (R-FL)

❖ Directs HHS Secretary to develop or adopt voluntary, national standards for the interoperability of health care IT systems within 18 months after enactment

❖ Secretary to consider combination of recommendations from NCVHS, MITAB, and members of IT and provider communities

❖ Puts in place a grant program for qualified practitioners, hospitals and other providers for acquiring and implementing IT

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Patient Safety Improvement Act (S. 720)

❖ In 2002, this patient safety legislation was introduced by Senators Jim Jeffords (D-VT), Bill Frist (R-TN), Judd Gregg (R-NH), and John Breaux (D-LA).

❖ The legislation was re-introduced under the bill number S. 720 on March 26, 2003

❖ Requires the HHS Secretary within 36 months of enactment to develop standards that promote integration of health care information technology systems; and

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Administration Involved in Activities

- ❖ Agency for Health Care Research and Quality

- ❖ Centers for Disease Control and Prevention

- ❖ Centers for Medicare and Medicaid Services

- ❖ Consolidated Health Informatics Initiative

- ❖ Department of Health and Human Services: Office of Planning and Evaluation and Office of Disease Prevention

- ❖ Food and Drug Administration

- ❖ National Committee on Vital and Health Statistics

- ❖ Department of Defense

- ❖ Department of Veterans' Affairs

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Administration-Related Activities

❖ Patient safety

❖ Public reporting of health care quality information

❖ Promoting adoption and recommending the use of specific IT standards

❖ Improving care outside the hospital and disease management with IT support

❖ Improving public health surveillance through standardized electronic data interchange

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President Bush Now Demonstrating Support

Remarks at March 4th AMA Meeting:

"Patient safety also improves when doctors can have access to health records without delay. When a patient has a medical emergency far from home, the attending physician should have quick access to that person's medical records. Yet the health care industry, while progressing in many areas, has lagged in information technology.

Right now, as you all know better than most, health care records are kept in different formats—believe it or not, a lot of times on paper. In files. That can get lost. In the budget for next year I propose an increase of 53% for funding to help hospitals use information technology to keep better records, to share that information with doctors so that we can continue to improve patient safety."

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Secretary Thompson Announces Support

Town Hall Meeting – Friday, March 21

- ❖ "Information technology is going to be the key driver of change for the 21st Century"

- ❖ Endorsed first set of clinical data standards for use by Federal Government – many more are coming…

- ❖ Announced intent to focus on economic incentives for IT in health care

- ❖ Emphasized importance of use of IT for public health and bioterror-related surveillance

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Consolidated Health Informatics Standards

❖ Standards for electronic exchange of clinical information to be adopted across Federal Government

➢ HL7 Messaging Standards

➢ NCPDP Script – Pharmacy Data - already covered by HIPAA

➢ IEEE 1073 – Medical Devices

➢ DICOM – Images

➢ LOINC – Lab Results

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CMS Administrator Demonstrating Support

❖ Commitment to adoption of clinical data standards – CHI Activities

❖ Commitment to launching of demonstration projects to evaluate reimbursement alternatives for IT

❖ Commitment to supporting rapid acceleration of adoption of electronic health records in ambulatory environment

❖ Involvement in Connecting for Health national demonstration project – Healthcare Collaborative Network

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FDA Commissioner Demonstrates Support

❖ Announced proposed rule regarding use of barcoding for medical products

❖ 21st Century Patient Safety Programs – using IT to drive automated data collection of adverse event data

❖ Involvement in Connecting for Health national demonstration project – Healthcare Collaborative Network

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FDA Recent Announcement

21ˢᵗ Century Patient Safety Programs

❖ FDA announced a new framework for innovative programs to identify and manage safety problems associated with FDA-regulated medical products more effectively, using modern information technology, partnerships with health care organizations, and more effective communication tools.

❖ There is considerable evidence that the "spontaneous" and "mandatory" reporting systems that are used to report adverse events to FDA do not always provide timely and complete information on the safety profile of FDA-regulated medical products. These systems depend on health care providers taking time to complete reports about the adverse events that they observe, and consequently many adverse events go unreported.

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FDA Recent Announcement

21st Century Patient Safety Programs

❖ While not perfect, these systems do provide valuable information, particularly on rare serious adverse events, and the agency is working to improve their efficiency through proposed revisions to existing reporting regulations that were announced.

❖ The will increasingly supplement the traditional approach to adverse event monitoring with new, automatic reporting and electronically-based risk communication with health care providers – e.g. electronic reporting of ADE information – Connecting for Health National Demonstration Project

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Other Critical Agencies

❖ AHRQ slated to receive $50 million in additional funding to support IT demonstration projects related to patient safety and having increasing involvement in accelerating the use of standards and interoperable systems

❖ New HHS position put in place - Bill Yasnoff, MD, PhD, Senior Advisor, National Health Information Infrastructure, Department of Health and Human Services

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Private Sector Stepping Up

❖ eHealth Initiative and Connecting for Health focusing enormous resources on accelerating the adoption of interoperable, standards-based information systems to support the needs of:

➢ Public Health

➢ Practicing Clinicians

➢ Hospitals

➢ Payers

➢ Patients

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Private Sector Stepping Up

❖ Momentum is spurring movement by several non-profit and trade groups – with particular focus on electronic health record and standards

❖ Proposals for funding for and/or payment for IT surfacing… LTRF, Hill-Burton and reimbursement-related proposals being vetted…continued emphasis on interoperable systems

❖ Philanthropies bumping up focus and resources devoted to this issue

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eHealth Initiative Mission

The missions of both the eHealth Initiative and its Foundation for eHealth are the same:

To drive improvement in the quality, safety, and cost-effectiveness of health care through information technology.

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Our Vision

Consumers, health care providers and those responsible for population health will have ready access to timely, relevant, reliable and secure health care information through an interconnected, electronic health information infrastructure.

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What Does This Mean?

❖ Computerized patient records in every clinician's office.

❖ Interoperable health care systems with secure connectivity across providers, patients, payers, public health and others.

❖ Clinicians armed with the information they need to make the best clinical decisions at the right time.

❖ Consumers, patients and caregivers armed with the information they need to manage and address their own health care needs.

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eHealth Initiative's Members

❖ Health care information technology suppliers

❖ Health systems and hospitals

❖ Health plans

❖ Employers and purchasers

❖ Non-profit organizations and professional societies

❖ Pharmaceutical and medical device manufacturers

❖ Practicing clinicians and their organizations

❖ Public health organizations

❖ Research and academic institutions

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eHI's Strategic Priorities

❖ Increase awareness of the role of information technology in driving greater quality, safety, and cost-effectiveness in health care

❖ Lay the foundation for an "interconnected, electronic health information infrastructure" by promoting the adoption of clinical data standards and enhanced connectivity

❖ Build the case for public and private incentives for better quality health care enabled by information technology

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eHealth Initiative Model

❖ Bring together leaders from every facet of health care…hospitals, payers, health care IT suppliers, manufacturers, practicing clinician groups, and government….to drive national change to support better health and health care…using information technology as a key enabler

❖ Drive change through actions by each key stakeholder group, advocacy and awareness building activities targeted to policy makers and industry

❖ Demonstrate value through a wide range of implementation and demonstration projects

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eHealth Initiative Laying Foundation for National Health Information Infrastructure

Public-Private Sector Collaboration for Public Health:

❖ Engaged CDC, CMS, public health agencies, providers, standards organizations, and vendors to develop and implement strategies to transmit electronic data of public health importance using operable standards and CDC's Public Health Information Network…data includes lab results, microbiology results, orders, and chief complaint data. Implementation guides to be released this week

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eHealth Initiative Laying Foundation for National Health Information Infrastructure

❖ Through the Markle Foundation's Connecting for Health initiative, we catalyzed national actions to lay the foundation for a national health information infrastructure by:

- Accelerating the rate of adoption clinical data standards to facilitate interoperability,

- Identifying practical strategies and solutions for the secure and private transmission of medical information

- Actively working to understand what consumers will need and expect from an NHII

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Connecting for Health Outcomes

❖ Consensus on a set of standards and definitions that are necessary to enable movement of data and knowledge within health care

❖ Consensus on those standards that are "adoption-ready" (government has moved to adopt internally those same standards)

❖ Overview of the "value proposition" for standards and an interoperable health care system

❖ High-level migration strategy for getting to an interoperable health care system

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Connecting for Health Outcomes

❖ Engagement of over 20 leading health care organizations including hospitals, IT suppliers and federal agencies in an unprecedented collaboration to demonstrate the *feasibility* and *value* of an electronic, standards-based model of data interchange to support health and health care

❖ Identification and communication of examples of privacy and security-related "exemplary practices" to support organizations across the health care system

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Connecting for Health Outcomes

❖ Definition of high-level characteristics and attributes of a personal health record (PHR) – survey results to be released

❖ A "call to action" from Connecting for Health regarding key steps related to moving towards an interoperable health care system

❖ Highlighting of leadership and commitment demonstrated by Connecting for Health organizations

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eHealth Initiative Laying Foundation for National Health Information Infrastructure

Accelerating the National Health Information Infrastructure: National and Regional Implementation and Demonstration Projects - $6 million committed

❖ Provide funding, technical assistance and support to national, regional and local demonstration and implementation projects to accelerate and support goals related to the information needs of providers, patients, payers and public health.

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Program Objectives

- ❖ Identify barriers to electronic data interchange and develop solutions and strategies for overcoming them using valuable input from existing regional and local initiatives and national experts

- ❖ Provide a forum to share barriers, strategies and best practices from the demonstration projects, widely to a variety of audiences using a variety of vehicles

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Program Objectives

❖ Build national awareness amongst policy-makers, health care industry leaders, and other drivers of change, regarding the feasibility and value of electronic data interchange for multiple stakeholders and the barriers that need to be cleared to realize this vision.

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Work Has Already Begun – Healthcare Collaborative Network

❖ Purpose of the national demonstration project

- Demonstrate the feasibility and value of an electronic, standards-based model of data interchange.

- Communicate that a wide variety of health care stakeholders, including hospitals, practicing clinicians, public health agencies, payers, researchers, and patients will benefit from the use of an electronic standards-based infrastructure.

- Build momentum for policy actions that will accelerate the adoption of data standards and interoperable, electronic health systems

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Healthcare Collaborative Network - Participants

- ❖ Hospitals

- ❖ Health Care IT Suppliers

- ❖ Practicing Physician Groups

- ❖ Public Health Agencies

- ❖ Payers

- ❖ Those With Interests in Patient Safety and Quality

- ❖ Those With Interests in Research and Evaluation

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Healthcare Collaborative Network: Data Elements

❖ The data elements that will be included in the rapid demonstration project are a subset of those that:

- Are necessary to drive improvement of care for those with diabetes and cardiovascular disease

- Will assist with public health surveillance, detection and response; and

- Will drive improvement in quality and patient safety

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Healthcare Collaborative Network - Data

- ❖ CDC Disease Surveillance and Stroke Initiative

    - ➢ Anthrax

    - ➢ Legionella

    - ➢ Respiratory Viral Test

    - ➢ Stroke Discharges

- ❖ CMS Quality-of-Care from Seventh Scope of Work

    - ➢ Ace Inhibitor Prescribed for Myocardial Infarction patients

    - ➢ Hemoglobin A1C for Diabetes patients

- ❖ FDA Adverse Drug Events

    - ➢ Low platelet count in Felbamate recipients

    - ➢ Pregnancy Test for Thalidomide recipients

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What You Can Do…

❖ Public health plays a critical role in driving an interoperable, electronic health care system

➢ Primary "user" or beneficiary of data to support critical public health roles

➢ Enormous power *if you ask…and ask in the same way*

❖ Align your forces around the need for standardized, electronic data and *speak with a common voice*

❖ Engage partners to help you get there

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Take-Aways

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